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The City of Prineville Railway — A Case Study of a Small Railroad Updated

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The City of Prineville Railway--A Case Study of a Small Railroad Updated

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Abstract

The City of Prineville Railway provides an excellent case study of the long-period experience with a small railroad--a type of railroad that has been of increasing interest in recent years, particularly those created to take over lines abandoned by major railroad systems. This paper brings up to date previous studies of the line. After early years of losses, the railroad was profitable for a number of years, but decline in lumber production due to the recession and increased truck competition, itself increased by the recession, have reduced the volumes of traffic considerably. The experience of the line in the last two years, of connecting main lines cancelling joint rates and eliminating parity for shippers on the line, is matched in many parts of the country.

The relationship with the city government, which owns the railroad, is examined in some detail. The city came to depend heavily upon the earnings of the line as a source of financing city expenditures. One consequence was the draining of funds that should have been used for track maintenance; another has been the serious problem created for the city as railway earnings have vanished with the decline in traffic. It is difficult to get voters to approve tax increases to offset the decline in railway profits.

The railway's experience in "leasing" a large number of freight cars from the car leasing firms as a source of revenue backfired, as it did for many small railroads, as car shortages changed to car surplusses.

Despite problems, however, the railroad is continuing to provide a highly essential service to the shippers of the community--the lumber and mills and molding plants, and the major inbound user--a large wholesale tire firm. Recently the railroad has developed piggyback traffic.

Over the 64 years of the operation of the railroad, the experience has shown that a city can operate a railroad effectively, and that the original investment by the city was justified by the earnings and the effect on community development. The railroad still has far more than adequate traffic for survival, but downward adjustments in staff and costs are always painful.

The City of Prineville Railway--A Case Study of a Small Railroad Updated*

John F. Due
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The abandonment of extensive mileage of the Penn Central and other eastern railroads, of the Rock Island, and major portions of the Milwaukee and planned abandonments of light traffic lines of other roads, such as the Burlington Northern, have led to the formation of a number of small local railroad companies that have taken over abandoned lines of major systems. This trend has increased interest in the operation of small railroads generally, which has resulted, for example, in the recent publication by the Association of American Railroads of a volume entitled Small Railroads (Washington, 1982). This paper surveys the experience of a relatively small railroad--the 18 mile City of Prineville Railway (C of P)--updating previous work in 1965-68 and in 1973.[1] The experience of the C of P offers significant conclusions for small railroads generally and municipally operated lines in particular.

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*The author is greatly indebted to a number of persons who assisted in the preparation of this paper, including Mrs. Frances Juris Rush, the retired city Recorder-Treasurer of Prineville; the members of the Shippers Advisory Board of the City of Prineville Railway; the Manager of the railroad, Mr. B. J. Wiggs, and other railway employees; the City Administrator, Mr. Henry Hartley, and others.

[1] J. F. Due, "The City of Prineville Railway--A Case Study in Government Enterprise," Quarterly Review of Economics and Business, Vol. 5 (Winter 1965), pp. 63-82; J. F. Due and Frances Juris, Rails to the Ochoco Country: The City of Prineville Railway, San Marino, Calif.: Golden West Books, 1968; and J. F. Due, Municipal Operation of Railway Lines, University of Illinois, College of Commerce Faculty Working Paper, 1974, pp. 15-50.

The City and the Railway

Central Oregon--the area directly to the east of the Cascades and extending from the escarpment south of Wasco County toward the California border, was settled relatively late because of difficult terrain, limited transport, and relatively low rainfall; it could not compete with the lush Willamette Valley for settlers in the early years. Settlement began in the 1860s--primarily cattlemen and sheepmen. Even by 1910 the area was very thinly settled, as much of it still is. Prineville, first settled in 1869, grew slowly, but it became the commercial center of a vast area between the Cascades and the Burns--John Day country, and from Cow Canyon to the area tributary to Lakeview and Klamath Falls. When railroads were built into Central Oregon from the Columbia River, the lines (a single line south of Metolius) missed Prineville by 18 miles for reasons of geography. Bend, the terminous, became the major industrial and commercial center within a short time. After efforts to get private enterprise to build a line from Prineville to the main line, the city built the railroad in 1917-18 in an effort to protect the economy of the city and to encourage the development of lumber mills. The city has operated the line continuously since that time, as a unit of the city government. Prineville had a population of only 1,100 when it built the line; today it has 5,260 (1982).

The Line--The 18 mile line extends from the yards on the north edge of the city 18 miles westward to Prineville Jct., where it connects with both the Union Pacific and the Burlington Northern, on a track owned by the latter but jointly used.[1] The line parallels

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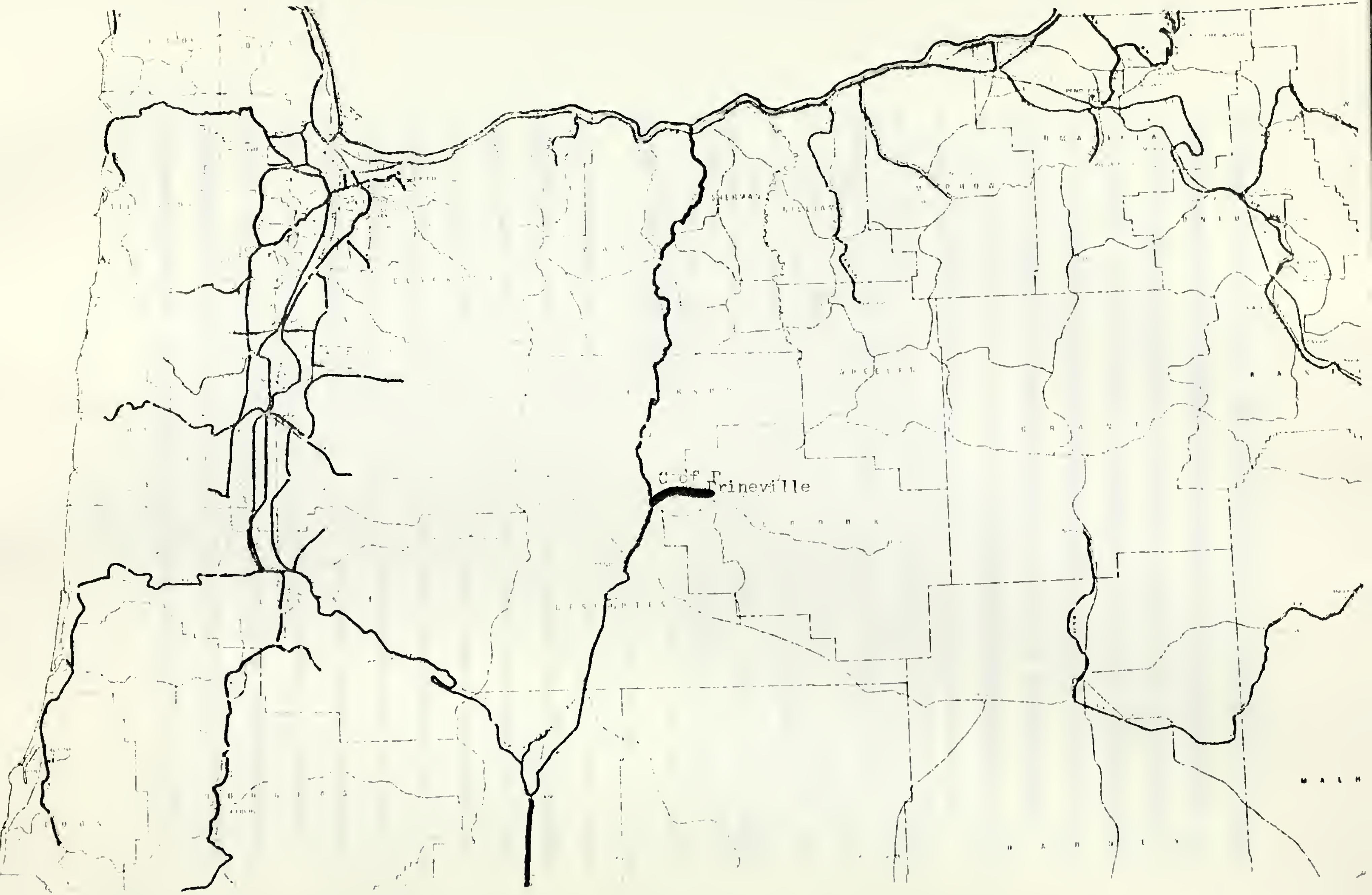
[1] The BN line extends from Wishram, on the Portland-Spokane route, through Bend and Klamath Falls to a connection with the Western Pacific at Bieber, California. The UP operates only from The Dalles to Bend.



City of Prineville Railway Source: *Oregon Rail Plan*, 1978

Lamonta road out of town, follows the Crooked River most of the way, and climbs on a 2 1/2 percent grade to the plateau on which is located the main line. There are no intermediate stations or sidings that are used. There are seven lumber-industry shippers located on the line, plus a produce warehouse and a grain and feed mill. Several other firms have direct access but do not normally use the line. The road has two long spur lines, one about a mile long, eastward from the yards along the edge of the city to the Ochoco Lumber Co. on the east edge of town, the other up a steep grade to reach the Hudspeth Mill and American Forest Products on the hill to the east of the city. The office and shops are located in Prineville.

Motive Power and Operation

The road has for the last 13 years had the same motive power--three ALCO 660 hp. 199,000 lb. 6 cylinder diesels. These are of course very small by present day standards. The first was purchased new in May of 1950, to replace 50 year old steam locomotives. A second was acquired second hand from the Spokane Portland and Seattle in 1961 (it has been built in 1941) and a third from the Oregon and Northwestern in 1969. They can be operated in multiple, and usually two are used for both switching and line operation, except when loads are very light. All three were completely rebuilt by Morrison Knudsen in the early seventies. Over the years these diesels served the road very well, at very low capital cost. But they are now old by any standards, 41 years being well beyond the normal life. All are suffering from various forms of metal fatigue and are limited to about 800 tons up the grade to the junction. The railroad would like to have two 2000 hp. diesels to replace the three, but acquisition is not being considered in the immediate future. The railroad does have reserve funds that could be used for the purpose. A standard caboose is used.

In the earlier years of dieselization, after two diesels were acquired, two trains were run 5 times a week, one in the daytime, one at night. Later the road shifted to once a day operation, 5 days a week. But as traffic increased, the two diesels could not longer take the train up the grade. Accordingly, the line returned to two trains a day. This continued until traffic fell off in the late seventies, when operation fell to one train a day, and finally to one train three times a week in 1979. The switching is done in the late afternoon. The run to the junction begins about 8 p.m., and the train returns anywhere from 10 to midnight or later, with the inbound cars distributed that night. Overtime often is necessary. Five to ten loaded cars is typical--by contrast to the 20 cars on each train of a decade ago. Originally each of the major roads had regular service through Prineville Jct. daily. Now their service has become somewhat irregular, typically three times a week (apart from BN through freights, which do not normally switch at the junction).

Traffic Patterns: Non-lumber Traffic

The railroad is and has been for several decades primarily a lumber carrier. But it was not in its early days, and unlike some of its Oregon neighbors, still has substantial non-lumber revenue. Table 1 provides data of total traffic by class of commodity from 1950 through 1981, with the 1920 data for purposes of comparison, and Table 2, ton miles.

TABLE 1

Cars Handled, by Type of Traffic, City of Prineville Railway
1920; 1950-1981

Year	Lumber	Lumber by products		Potatoes	Livestock	Grain	Petroleum Products	Fertilizers	Tires	Cement	Autos	Company Mdse.	Miscellaneous	Feed	Total
1920															
outbound	0	0		0	418	10	0	0		0	0	0	22	0	450) 665
Inbound	0	37		0	10	0	36	ns		ns	15	ns	86	21	205)
1950	7,936	0		469	134	24	415	ns	0	ns	91	28	213	ns	9,310
1951	8,454	0		416	182	14	406	6	0	50	56	30	127	ns	9,741
1952	7,446	0		292	61	11	402	1	0	38	31	27	107	ns	8,416
1953	7,543	0		206	43	12	438	6	0	28	41	18	101	44	8,460
1954	7,954	0		228	57	14	488	2	0	15	54	20	101	42	8,975
1955	8,116	0		253	147	10	403	5	0	13	84	21	124	ns	9,176
1956	6,633	18		153	26	3	326	5	0	11	65	25	112	ns	7,377
1957	5,700	180		184	29	1	347	8	0	9	59	4	124	ns	6,645
1958	6,073	796		135	81	0	388	9	0	8	42	11	83	ns	7,626
1959	6,049	1,025		54	7	3	385	14	0	9	42	11	86	ns	7,685
1960	4,545	930		100	0	5	373	8	0	5	35	11	140	ns	6,152
1961	4,766	988		91	5		320	12	0		52	15	52	128	6,429
1962	4,913	1,016		165	0		328	17	0		5	16	56	70	6,586
1963	5,366	1,054		243	1		310	28	0			16	53	41	7,112
1964	5,045	1,005		193	0		258	14	0			17	33	53	6,618
1965	5,539	924		140	0		284	14	0			9	51	64	7,025
1966	5,364	1,361		241	0		303	17	0			18	78	48	7,430
1967	5,421	1,273		217	31		283	4	0			12	101	12	7,354
1968	6,375	2,240		214			373	9	0			20	60	34	9,275
1969	5,848	2,444		323			294	9	0			25	48	22	9,013
1970	6,024	3,012		242			235	2	29			4	61	21	9,682
1971	6,647	2,983		100			228	2	62			0	38	16	10,076
1972	6,639	2,389		62			154	2	111			2	191	9	9,559
1973	6,957	2,547		53			113	4	121			4	29	9	9,477
			Logs		Food	Paper				Machinery & Metals	Chemicals				
1974	5,699	2,259	ns	28	12	13	6	2	119	5	3	0	23	3	8,172
1975	4,813	2,342	ns	18	9	12	10	3	102	3	5	5	109	1	7,432
1976	5,108	2,412	ns	10	16	18	5	1	252	3	4	6	12	0	7,847
1977	4,788	2,352	ns	14	6	14	9	0	309	1	4	2	6	0	7,505[1]
1978	4,644	1,729	35	2	8	1	11	0	420	0	5	0	4	0	6,879[1]
1979	4,100	1,685	59	0	5	4	6	5	345	2	0	0	0	6	6,217[1]
1980	3,105	1,722	ns	0	0	0	4	0	284	3	11	9	275[2]	0	5,413
1981	2,286	1,303	75	0	0	0	0	0	279[4]	6	5	8	70[3]	1	4,033

____ in a column indicates 0 in subsequent years.

ns - not separately stated.

1. Omitting empty cars reported in source documents: 30 in 1977, 32 in 1978; 15 in 1979. These are special movements of empties, not ordinary return of empty cars.
2. 273 containers returned empty.
3. 69 containers returned empty.
4. 29 of these, TOFC. Some shipments in the new categories shown from 1974 on were included in other categories prior to that year.

Source: City of Prineville Railway, Summary of Carloads and Tonnage, annual, and Cars Handled by Type of Traffic, 1981. Data from the two sources are not entirely consistent, but the differences are minor. Totals are taken from the first source.

TABLE 2

Traffic Volume by Year
City of Prineville Railroad
1919-1981

Year	Ton Miles (000's)	Revenue Passengers
1919	204	8804
1920	245	15213
1921	175	9248
1922	180	9319
1923	250	7796
1924	225	2152
1925	207	2173
1926	235	1197
1927	257	556
1928	231	562
1929	231	464
1930	171	165
1931	164	152
1932	152	36
1933	114	650
1934	159	147
1935	143	33
1936	275	17
1937	380	52
1938	699	45
1939	1718	6
1940	2042	
1941	2563	
1942	3041	
1943	2476	
1944	2777	
1945	2444	
1946	2557	
1947	3247	
1948	3529	
1949	3723	
1950	4847	
1951	5014	
1952	4446	
1953	4363	
1954	4704	
1955	4730	
1956	3902	
1957	3646	
1958	4246	
1959	4328	
1960	3493	
1961	3657	
1962	4252	
1963	4661	
1964	4403	
1965	4719	
1966	5056	
1967	5112	
1968	6600	
1969	6476	
1970	7199	
1971	7488	
1972	7057	
1973	7784	
1974	6975	
1975	6656	
1976	7003	
1977	6425	
1978	5635	
1979	5407	
1980	5006	
1981	3884	

Source: City of Prineville Railway, Annual Summary of Carloads and Tonnage; I.C.C. Statistics of Railways.

In early years, the farm product traffic was dominant. In 1920, for example, livestock constituted over 90 percent of the outbound traffic and two-thirds of the total traffic. Much of the livestock traffic had shifted to trucks before 1950 and virtually all by 1958. Potato traffic became of major importance in the early fifties, with little trend from 1952 to 1970, and then vanished to trucks. Incoming traffic in feed and fertilizer likewise disappeared in the sixties and early seventies.

The incoming manufactured goods traffic has largely disappeared, with the exception of tires, as noted below. The cement traffic was lost to trucks in the fifties; that in automobiles in 1961 with the change in the methods of shipping them, which necessitated unloading facilities not available in Prineville, and in petroleum products, once a significant source of revenue. Gasoline for the two major distributors, Standard of California and Union, remained on rail until the early seventies (much longer than in most parts of the country) and then was transferred to truck. The petroleum traffic since then has been nominal. In general, Prineville is not large enough for manufactured goods traffic to move in in carload quantities.

The one exception is the traffic in automobile tires and related products. This is one of Prineville's two greatest business success stories of the last decade. Les Schwab, who ran a small tire shop, entered the wholesale tire business in 1970. In that year, the railroad brought in 29 cars of tires. At the present time, Schwab has 130 retail tire stores throughout the northwest, employing 180 persons in Prineville alone. The firm is reported to be the largest tire wholesaler in the northwest, handling a wide range of brands of tires. The firm supplies all its retail stores from Prineville (some distribution previously done in Seattle is being transferred to Prineville). Most tires come in by rail, including some piggyback, from various suppliers in the midwest and east (Memphis is the most important source) and are distributed to the stores on a weekly basis in the firm's own trucks. The only exception to the rail movement is the trucking of some imported tires (Japan) from the ports of Portland and Los Angeles. The traffic reached a peak of 420 cars in 1978; the figure for 1981 was 279 cars. The traffic is expected to increase. The firm finds rail to be substantially cheaper than truck and is one of the railroad's strongest supporters. When the firm started out on a small scale basis, it made one bad mistake--it did not locate its plant on the railroad line, and thus must truck from the station area. The rail traffic yielded in 1981 $392 per car, compared to $216 per car on nontransit lumber.

The Lumber Industry and Lumber Traffic

Lumber traffic, nonexistent in 1920 (the mills were not established until the 1930s) peaked in the early fifites, fell almost in half by 1960 (mostly because fewer logs were available), peaked again but below the earlier figures in 1971, and then has fallen sharply, for reasons discussed below. Wood chip traffic began in 1956-57 (the chips had previously been burned), rose steadily till 1970 (when there was exactly one car of chips for every two cars of lumber) and then has declined as lumber production has fallen. While traffic in logs (much of it now from central Washington) is small in magnitude, it has been increasing, because of a shortage of logs in the Prineville area. Much of the decline in lumber traffic is of course temporary, a reflection of the effect of high interest rates and recession upon the demand for lumber.

The Industry--The basic element of the economy of Prineville is lumber. While sawmills operated on a small scale basis for local consumption from the 1880s on, commercial production on a significant scale began only in 1935. Production expanded rapidly after World War II and then leveled off. The lumber industry contains essentially two elements: sawmills--the production of lumber--and remanufacture--the production of millwork. These may be combined in the same firm, or carried on by separate firms.

There are five sawmills:

Pine Products, the original mill established in 1935, with a standard sawmill and a new (1980) highly automated mill for small logs.

Ochoco Lumber Co., started in 1938, largely locally owned with some outside investors; Ochoco is the only mill to own substantial timber land of its own.

Hudspeth Sawmill Co., established in 1947, family owned. The firm also has operated a mill in John Day, now closed.

Louisiana-Pacific, the only sawmill operated by a large outside company. The firm purchased the property of the local Prineville Forest Products Co. in 1973; the local firm had closed after four years of operation.

Consolidated Pine, established in 1952, the only sawmill that also operates a millwork plant. The firm is owned by outside investors.

There are two exclusively millwork or remanufacture plants:

Clear Pine Mouldings, a subsidiary of Contact Lumber Co. of Portland, established in 1941.

American Forest Products Co., one of the largest millwork plants in the northwest, with operations in California as well. This was once a subsidiary of Bendix, but was later sold to private investors.

The development of this operation was another success story in Prineville. It was started by Leonard Wilkinson in 1959 as COIN Millwork and expanded in a decade to a major operation reportedly the largest employer in central Oregon. Wilkinson sold to AFP in 1977, retired, and died shortly thereafter.

In addition, D & E Wood Products produces various specialty products.

Thus some lumber is shipped out in rough or planed form, but a substantial portion of the local output goes to the millwork plants, which in turn also bring in lumber from the outside, mainly from Klamath Falls and northern California. The local mills cannot provide adequate lumber of the right types for the milling operations.

This inbound lumber came in under milling in transit (MIT) rates, by rail, and the millwork moved out by rail. The major railroads nationally have been seeking to eliminate MIT rates (they regard the short inbound haul as too costly), and while the rates still exist for lumber, the added charges have made them much less attractive. AFP still brings in considerable lumber under MIT, but Clear Pine and Consolidated are primarily having their lumber supply trucked, mostly from Klamath Falls.

It has long been felt that the C of P did not receive adequate compensation for the transit traffic; C of P receives nothing on the outbound lumber, but instead the UP and BN paid the salary of one clerk for the C of P, which did all the billing. The C of P did not receive the transit charge.

The principal wood is Ponderosa pine, at least 70 percent and often more of the output. This goes into a wide range of uses, but particularly for windows, doors, panelling, and the like, in contrast to fir, the other principal Northwest lumber, that is used for sheeting, rafters, studs, and similar type. While the lumber, per se, has experienced increased difficulty in competing in the Midwest and Eastern market with Southern and Canadian producers, the higher quality Ponderosa pine is able to compete as millwork even in the South. There is some production of fir and larch in the Prineville mills, but it is less profitable.

From the late thirties up through the mid seventies the Prineville mills in general did well, with remanufacturing becoming of increasing importance. The mills depended heavily upon Forest Service timber, and there was barely enough timber for them to operate to full scale--but they operated profitably. Then came trouble, when Louisiana Pacific (L-P) bought the small mill of Prineville Forest Products, expanded it, and started bidding. The result was to drive up timber prices. Since there were not enough logs for five mills, L-P commenced to bid in the Deschutes National Forest against Brooks-Scanlon (B-S), with plants in Bend and Redmond, which heretofore had avoided competition with the Prineville mills in the Ochoco National Forest. But after L-P won several biddings, B-S retaliated by bidding in Ochoco and winning. The result was to drive prices up drastically--to two times or more the minimum set by the Forest Service--in 1977 and 1978.[1] Ultimately B-S was purchased by Diamond International, which shows less interest in carrying on cutthroat bidding. But the Ochoco Forest simply cannot support five mills, and bringing in logs from Washington state, as is being done to some extent, is costly. Sooner or later one mill must go.

As of mid-1981 there is no problem of cutthroat bidding; the mills have contracts on which they are obtaining delays in cutting. All have been operating well below annual capacity. As of mid-June 1982, only Ochoco, with its own timber and private purchases, computerized log scanning, and strong marketing department, was operating near full scale. Hudspeth had been closed down for over a year. L-P reopened in July 1982 after being closed for eight months. Consolidated and Pine Products closed in June, but reopened in July. The result is substantial loss in employment (the county has a 24% unemployment rate), and in traffic for the railway.

With normal operation, the mills provide about 2000 jobs. Figures reported in 1977 and 1978 indicate that AFP had 585 employees; Ochoco around 120, Hudspeth 225, Clear Pine 250 (405 at the peak), Consolidated 140. The lumber mills are "medium" sized mills by usual classification; while economies of scale are not as important in lumber production as in some other fields, they are of some influence. The local mills, therefore, concentrate on specialty products and mixed shipments rather than direct competition in, for example, 2 by 4s.

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[1] The battle for logs was described in feature articles in the Prineville Central Oregonian, September 27, 1977 and May 3, 1979. For example, in September 1978, the price of pine reached $280 per thousand; the successful bid was $3.5 million compared to the Forest Service $2 million minimum.

The current problems of the industry are of course a result of the recession and high interest rates, that have drastically curtailed construction, and lowered lumber prices relative to costs. Obviously with recovery and lower interest rates the industry will revive. Some experts believe that it will not recover to earlier levels; others believe that there will be a temporary boom as a result of catching up with the construction deferred by the recession. The longer range question for Prineville is more difficult; there will be a continuing steady supply of logs, but it is very unlikely that five sawmills can be supported.

The Railroad's Lumber Traffic. General revival of the lumber industry will of course increase the railroad's lumber traffic to some extent. The serious problem, however, from the railroad's standpoint is the extent to which traffic lost to trucks can be regained, or whether the loss trend will continue. The lumber and millwork traffic from the Prineville area remained almost totally immune to truck competition for a very long period; as late as 1973, there was only a nominal amount of trucking of inbound shop lumber or outbound products, except some millwork to the west coast, and an occasional back haul.

There began in the mid seventies a steady shifting of traffic from rail to truck; one of the first public statements appeared in the Central Oregonian's feature section, Heritage '77, October 1977, quoting Ed Wilson, Ochoco's marketing chief, who pointed out the trend and the potential hazard for the railroad.

It is not possible to obtain a precise current figure. But apparently not over 40 percent of the lumber is moving out by rail (one mill reports 45%, another 40%, another 12%).[1] Of the millwork, the rail percentage is much higher--one reporting all rail until some recent experimental loads to the east, one only 8% truck, another 60% rail. The shift has occurred primarily in the last five years.

There are several reasons for the trend, various shippers stressing different reasons:

1. The tendency of customers to purchase in smaller quantities, because of reduced sales, high interest rates, and, for several years increases in lumber prices greater than those of the price level. A typical truck load is no more than half the usual rail car minimum load.
2. Difference in delivery time, particularly important in a period in which lumber prices have been changing rapidly. Examples given by shippers include Chicago: 3 days vs. 10; to the east, 4 days instead of 2 weeks.
3. Lessening of the differential between rail and truck rates. While the differential was 50% or more a decade ago, it is now typically no more (to the midwest) than 10 to 30 percent. Many buyers are willing to pay the higher rate because of the time saving. The differential has lessened because of the higher weight and length limits and the rise of the owner-operator, willing to work for much less than the union

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[1] In the Central Oregonian of February 14, 1980, two mills indicated the following percentage by rail: Ochoco, 60%; Hudspeth, 80% including subsequent millwork traffic.

truck driver. Railroad wages have escalated more than general wage levels in the economy.[1] Truck lines are also more free than they were to quote lower rates because of deregulation, and frequently, low back haul rates--often lower than rail rates--are available.

4. Loss of rail sidings by customers as a result of abandonment of lines in the east and midwest.
5. Shift of markets; a higher percentage of Prineville lumber and millwork is going to the west coast, and thus trucking is relatively more advantageous. Particularly for lumber, it is increasingly difficult for northwest mills to compete with southern and Canadian mills.

In addition, trucks have the continuing advantage of less damage; millwork suffers damage from shifting of loads in freight cars. As noted below, some additional loss occurred during a period of shortage of boxcars.

Some of the loss may have been temporary, because of the effect of high interest rates and the recession in leading customers to request small shipments. Beyond this, it is very difficult to predict whether the trend will reverse or continue. There are several potential influences:

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[1] R. G. Harris and T. E. Keeler, Determinants of Railroad Profitability. University of California Transportation Policy Research Center, Working Paper SL-8000, 1980, p. 3.

1. The attitude of the major roads serving the northwest toward preserving the lumber traffic. Some shippers feel that the UP and the BN are placing so much stress on coal and grain that they are ignoring lumber. They allowed the fresh fruit and vegetable traffic to slip away, and only recently, following deregulation, began a concerted effort to win some back. The C of P has little influence on their policies. Clearly, lumber rates exceed out of pocket costs; the railroads have substantial leeway under deregulation to lower their rates to protect the traffic.

   There is little opportunity for Prineville mills to take advantage of multi-car or contract rates, as the shipments go to diverse locations.

2. Relative trends in costs. A sharp rise in energy costs would aid the railroads, as they are far more fuel efficient (when traffic volume is high) than trucks.

   Relative wage trends are also significant. As noted, in recent years, wages in the industry have risen faster than wage levels generally, and this year much faster than truck wages. In addition, railroad labor costs are artificially inflated above real economic costs by obsolete features of union contracts. Adjustments are being slowly made; if the railroads can speed up the process of contract adjustments and constrain wage increases to national patterns, their relative position will improve.

Potential Loss of the Chip Traffic. The traffic in wood chips, going to Longview, Washington, has become an important source of rail revenue, yielding in 1981, 37 percent of the railroad's gross operating revenue. Some of this traffic has been lost because Clear Pine Mouldings grinds its chips to sawdust and trucks to a plant in Bend. Otherwise, the traffic has remained on rail thus far. But the Longview Fibre Co., to which the chips go, has built a chip loading dock in The Dalles and is encouraging the use of a truck-barge combination. So far the rates are not competitive--but the policy constitutes a threat to the rail traffic.

Attitudes of the Shippers Toward the Railway

Despite the transfer of considerable traffic to trucks, the shippers in general regard continuation of the railroad as essential to the lumber industry--particularly the moulding plants. Most of the shippers indicate preference for shipment by rail, in part to support the railroad, and indicate preference for being able to return to primary use of rail when conditions permit. There are exceptions and one or two are pessimistic about the future of the railroad. But on the whole there is strong shipper support and conviction of the importance of continued operation of the railroad for their activity and for the community.[1] There is also widespread attitude that the present railroad manager is highly cooperative with the shippers and has encouraged efficient operation. But there is some belief that the railroad has lacked a top level rate person, able to deal effectively with the major carriers.

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[1] This was expressed very clearly in statements in the Central Oregonian, February 14, 1980.

Rates and Rate Problems

The key rates to the railroad are the outgoing rates on lumber and millwork. Until very recently, Prineville mills had parity with those of other central Oregon points, as the rates were the same for all of them to midwest and eastern destinations. With the Staggers Act, however, the railroads have much greater freedom to alter rates without commission action, and as a result the BN, and to a lesser degree the UP, have commenced to issue some new rates from Prineville Junction rather than from Prineville. This will result in a combination rate from Prineville, thus higher than the rates from Bend and Redmond. The C of P will have to offer a relatively low rate, less than its share of the through rate, to hold the traffic; otherwise there is increased danger of trucking of the lumber, and possible movement of the mills to main line points. The existing rate divisions, while not outstanding from the point of view of the C of P, have generally been regarded as adequate. This tendency to eliminate joint rates is nationwide, particularly on the part of Conrail. The major roads believe that the share received by the small roads has often been excessive, even though the latter do the switching and typically the billing and interline settlement, and thus are entitled to a much larger share than one proportional to mileage. The greatest harm has been suffered by smaller roads that participate in overhead or bridge traffic between two major carriers, such as the Green Bay and Western, but others are suffering as well. The ICC does retain jurisdiction, but has been reluctant to exercise it, as witnessed by the Conrail grain rate case, in which the elimination of joint rates has threatened to put two railroads in the New York City area out of business. There are a large number of similar cases pending before the ICC currently, and some decisions are likely to go to the Supreme Court.

There is little the C of P can do about this, except to present as strong a case as possible to the BN and the UP to continue parity. The shippers, particularly where they have mills on other lines as well, may be able to be more persuasive than the C of P.

By contrast, the BN, but not thus far the UP, has been cooperative in establishing joint piggyback rates, with a reasonable share for the C of P.

Earnings and Expenses

Tables 3a and 3b show the revenues, expenses, and other profit and loss statement items from 1919 down to the present time. Early profits gave way to 15 years of losses, 1924-1938, made up by the city. Except for 1945, when heavy maintenance expenses (treated as current expenses) caused a loss, 1938 was the last year of losses until an estimated loss figure for 1981. In the 1951-59 period, net earnings from railroad operations averaged $136,000 per year, a 20% return on investment; from 1960 to 1967, $91,000, or 12% (lumber production was down in this period), and 1968-1975, $173,000 or 16% return. The decline started after 1973, and particularly from 1977 on, as traffic fell. This, as noted, encouraged the experiment with car leasing, which for two years

TABLE 3a

Revenues, Expenditures, and Net Earnings
City of Prineville Railway
1919-1960
($000s)

Year	Operating Revenues	Operating Expenses	Net Railway Operating Income
1919	34	23	10
1920	49	37	12
1921	36	34	2
1922	38	37	2
1923	41	35	6
1924	33	42	- 9
1925	30	42	- 12
1926	30	35	- 7
1927	27	28	- 1
1928	28	30	- 2
1929	32	31	0
1930	21	27	- 6
1931	19	24	- 5
1932	16	21	- 5
1933	14	19	- 5
1934	14	19	- 5
1935	15	22	- 7
1936	18	21	- 3
1937	26	40	- 15
1938	41	48	- 11
1939	78	67	6
1940	105	70	27
1941	129	65	56
1942	148	84	53
1943	122	89	24
1944	141	112	17
1945	103	168	- 80
1946	152	136	9
1947	191	170	5
1948	270	204	47
1949	334	227	81
1950	393	286	85
1951	417	257	142
1952	374	222	136
1953	371	214	138
1954	406	241	146
1955	406	244	141
1956	357	248	85
1957	346	192	126
1958	395	198	165
1959	390	214	149
1960	306	192	80

Source: I.C.C. Statistics of Railways volumes.

TABLE 3b

Revenues, Expenses, and Net Earnings, City of Prineville Railway, 1961-1981
($000s)

Year	Railway Operating Revenue	Railway Operating Expenses	Taxes	Railway Operating Income	Freight Car Rental Cost	Net Railway Operating Income	Net Gain From Car Leasing	Other Income[a]	Net Income
1961	330	211	10	109	38	71		7	78
1962	351	215	11	125	21	104		9	113
1963	376	227	11	138	15	123		12	135
1964	332	219	12	102	13	89		19	107
1965	364	235	13	116	21	95		13	107
1966	372	253	14	104	16	87		13	100
1967	363	252	16	94	20	75		20	94
1968	450	258	17	175	19	156		14	169
1969	466	288	22	156	25	131		20	150
1970	557	296	24	237	21	216		20	234
1971	665	371	29	264	33	231		26	256
1972	688	421	29	239	58	181		23	202
1973	751	422	37	292	59	233		25	259
1974	737	471	51	215	57	160		37	196
1975	761	518	54	189	60	129		55	184
1976	897	648	69	181	62	119		26	144
1977	867	667	70	131	60	71	--	30	98
1978	863	682	75	105	103	2	86[e]	33	122
1979	880	687	74	153	111	42	133[e]	48	235
1980	956	794	62	100	61	39	53[e]	80	171
1981	816	727*	81	8	33[e]	-25*	28[e]	132	135*

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[a] Less certain minor adjustments.

*Estimated figure exclusive of rehabilitation funds.

[e] Estimate.

Source: City of Prineville Railway, Annual Statement of Operating Revenues and Expenses.

and in part in a third resulted in holding net earnings up to earlier levels--though the earnings from rail operation, per se, continued to fall, with a deficit in 1981 (and undoubtedly in 1982 as well). Now, of course, the leasing contribution is small. The figures in recent years are in part estimates, since the Federal rehabilitation grants are included in the revenues and the rehabilitation expenditures in the expense figures. These have been removed from the figures in the tables so far as possible, but the resulting figures do involve some estimation. It is obvious, in any event, that the railroad is barely breaking even and is probably showing some deficit from operations.

Over the years the railroad built up a substantial reserve; it is impossible to obtain the exact figure, but judging from the interest earned, it is between $800,000 and $1 million. The earnings on this sum are of course important to the railroad, and the sum itself can be used if necessary to complete urgent rehabilitation and ultimately to replace the diesels.

Thus the railroad, over most of its life, has earned a respectable figure upon the capital investment. The current problem is the result of the traffic decline, as noted, caused by the recession and high interest rates and consequent construction decline, and loss of traffic to trucks. If present conditions were expected to continue, and costs could not be reduced, the city would do well, on a strict dollars and cents basis, simply to liquidate the railroad. But there are several important considerations dictating against this course of action. First, almost certainly construction and thus lumber traffic will increase again. Secondly, it should be possible to reduce costs drastically, if, as a result of trucking, traffic continues at low levels. Management has reduced the number of employees from 23 in 1973 to 16 currently. Trains are operated only three times a week instead of twice daily, as in the mid seventies. Further reductions are clearly possible. The railroad originated or terminated 224 cars per mile of line in 1981. For some years, the Interstate Commerce Commission regard a figure of 34 cars per mile as the typical breaking point at which operation could not be economically sustained. On this basis, the railroad could be economically viable at 15% of the present traffic but of course with drastic reduction in personnel. More seriously, many railroads have survived indefinitely at no more than 100,000 ton miles per mile of line--whereas the Prineville line in 1981 has 215,777; in fact, many survive at 50,000 and even less.[1] There is no danger, therefore, of the need to abandon the line--but drastic change in operation would become necessary if traffic stayed at much lower levels than at present--lower wage levels, less specialization of labor, and junction settlements. And there would be no possibility of revenue for the city. For a profitable, frequent service railroad yielding the city substantial revenue, 50 percent more traffic than the present is necessary.

Secondly, as noted, shippers universally regard retention of the line as imperative for operation of the mills and economic development of the area. While trucking has made substantial inroads into the traffic, rail service is imperative for much of the traffic, given relative costs.

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[1] One estimate, by operators of small railroads in Indiana, is that 75 to 80 cars per mile is the minimum for profitable operation.

Table 4 shows the breakdown of expenses over the period from 1963, in dollar terms and percentage wise. Percentages are not given for 1981 because of the distortion created by the rehabilitation expenses. In general the percentages show remarkably little variation. Maintenance of way expenditures averaged 24% of the total, with a range from 21 to 28 in the period prior to 1975, and then began to rise as the road sought to catch up on deferred maintenance, reaching 42% in 1980. Maintenance of equipment averaged 16%, with little trend; traffic between 1 and 2 percent. The major cost item is for transportation; that is, train operation, about half of the total in peak years. The average was 44% in 1963-68; 50%, 1969-75; and 43%, 1975-80, reaching a low of 37 percent in 1978.

General administrative expenses averaged 10% over the period, showing a slight downward trend to 1973 and upward since. Both taxes and net rent for freight cars (not included in operating expenses) showed a somewhat greater increase over the period than the total operating expense figure. Car rentals are particularly sensitive to volume of traffic. They rose rapidly over the period down to the late seventies because of the sharp increase in per diem and incentive payments prescribed by the Interstate Commerce Commission.[1]

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[1] For a study of the responsiveness of light traffic railroad costs to changes in the volume of traffic, see Alberta Charney, Nancy Sidhu and J. F. Due, "Short Run Cost Functions for Class II Railroads," Logistics and Transportation Review, Vol. 13 (1977), pp. 345-59.

TABLE 4

Major Expenditure Categories
City of Prineville Railway
1963-1981

Year	Operating Expenses in Thousands of Dollars and as % of Total Operating Expense										Taxes 000's	Net Rent 000's	Rail Replacement Tons	Tie Replacement
	Maintenance of Way		Maintenance of Equipment		Traffic		Transportation (Train Operation)		Miscellaneous and General					
		%		%		%		%		%				
1963	49	22	44	19	3	1	103	44	26	11	11	15	13	760
1964	59	27	27	11	4	2	99	45	29	13	11	13	9	258
1965	51	22	50	21	4	2	102	43	28	12	13	21	7	184
1966	70	28	43	17	5	2	106	42	29	11	14	16	78	429
1967	66	26	40	16	5	2	109	43	32	13	18	18	147	800
1968	60	23	44	17	6	2	122	47	25	10	17	19	82	835
1969	61	21	42	18	8	3	149	51	29	10	22	25	60	305
1970	68	23	44	15	5	2	148	50	31	8	24	20	3	1,981
1971	89	24	58	16	9	2	184	50	32	9	29	33	57	1,912
1972	112	27	54	13	9	2	209	50	36	9	28	58	0	1,946
1973	103	24	52	12	9	2	221	52	37	9	38	59	110	1,177
1974	109	23	63	13	10	2	229	49	58	12	51	56		
1975	139	27	72	14	6	1	249	48	51	10	54	60		
1976	216	33	82	13	8	1	287	44	55	8	69	62		
1977	202	30	92	14	11	2	293	44	69	10	70	60		
1978	185	27	96	13	11	2	327	48	63	9	75	103		
1979	202	29	87	13	12	2	303	44	82	12	74	111		
1980	336	42	66	8	14	2	292	37	86	11	62	61		
1981	(171)[1]	--	69	--	15	-	302	--	106	--	81	33		

[1] Reported figure is $747,000, of which approximately $516,000 was financed by the rehabilitation grant. There are minor differences in the figures of taxes and net rent in this table and Table 3b because of differences in sources.

Source: City of Prineville Railway, Annual Statement of Operating Revenues and Expenses.

Relationship with the City

The precise relationship of the railroad and the city has never been clearly defined. The railroad is essentially an agency of the city government, not a separate corporation, as is the Belfast and Moosehead Lake Railroad in Maine, owned primarily by the city of Belfast. For many years the railway fund was shown as a separate fund in the annual city budget. Following a ruling of the Oregon Department of Revenue that since the railroad is subject to the Interstate Commerce Commission budget control, the Oregon Local Budget Law is not applicable, the railroad budget is no longer shown in the city budget, and only the amount of the transfer from the railroad fund to the general fund. The railroad is regarded as a entity distinct from the city for purposes of the Railway Labor Act, the Interstate Commerce Act, and the Railroad Retirement Act.

Nevertheless, the railroad is under the jurisdiction of the City Council, which delegates general supervision to the three member Railroad Commission, made up of three members of the council. However, the Commission and the Council do not attempt to intervene in the operation of the railroad, but only in major policy issues. Supervision is left in the hands of the manager, who is appointed by the City Council upon recommendation of the Commission. The general impression is that the relationship between the city government and the railroad is not as close as it was 15 years ago.

A Shippers Advisory Board, which has existed, at least on paper, off and on over the years, has commenced to function actively during the last year (1981-82). All of the major shippers are represented on the Board, which meets quarterly with the railway manager and the mayor. All personnel matters are handled by the Manager.

Table 5 shows the financial relationships between the railroad and the city. The city provided the funds through a bond issue to build the railroad; the last of the bonds were paid off in 1963. The city advanced about $66,000 to the railway in the period 1924-1938, primarily to cover deficits. Since 1941, the city has received a total of $3.273 million.

In the period from 1940 through 1981, the railroad earned, from railway operation, $3,934,000. In addition, the railroad earned about $700,000 in the form of other income, and an estimated $300,000 out of the car leasing. Thus in total the railroad earned about $5 million, of which the city received $3.3 million, $1.7 million being used for improvements to the railway and added to reserves, which total between $800,000 and $1 million.

For every year from 1950 to 1977, the railway contribution to the city exceeded the city property tax levy. In the years 1964 through 1968, the revenue was sufficiently great to allow the city to avoid any levy. From 1969 through 1976 the railway contribution was between three and four times the property tax levy, and the property tax rate, which averaged $1.28 per $1000 assessed valuation, was very low compared to other cities in Oregon of comparable size; for example, in 1978, the rate in Bend was $4.34, in Redmond, $5.83, in Madras, $7.78. In 1980, the average for Oregon cities between 5,000 and 10,000 population was $4.56 compared to Prineville's $2.03. The contribution figure was usually suggested by the railway and accepted by the city—

TABLE 5

Prineville Municipal Receipts from the Railway and Property Taxes
1935-1983

Year*	Railway Contribution (dollars)	City Property Tax Levy (dollars)	City Property Tax Rate (mills)
1935	2,275	13,623	28.8
1936	-2,275	16,510	37.5
1937	-2,275	17,060	37.9
1938	-2,275	17,688	38.1
1939	-2,275	18,319	36.0
1940	-2,275	19,905	33.3
1941	12,500	22,663	33.9
1942**	10,575	11,672	14.5
1943	15,425	12,932	14.5
1944	10,000	13,621	15.1
1945	-15,000	14,488	15.2
1946	0	25,129	26.0
1947	21,698	26,838	25.0
1958	0	26,597	21.0
1949	8,000	27,362	18.5
1950	42,966	28,493	17.8
1951	42,521	30,511	17.3
1952	50,000	46,590	22.1
1953	63,000	48,121	21.0
1954	75,000	48,952	21.9
1955	120,000	50,115	21.6
1956	120,000	28,511	12.0
1957	120,000	43,925	17.7
1958	90,000	45,815	19.0
1959	80,000	47,799	19.2
1960	86,000	30,934	8.7
1961	90,000	37,831	10.3
1962	80,000	29,719	7.7
1963	79,000	29,779	7.7
1964	79,000	0	0
1965	92,000	0	0
1966	108,327	0	0
1967	121,600	0	0
1968	80,000	0	0
			$s per $1,000
1969	95,000	28,779	$1.40
1970	115,000	32,665	1.50
1971	115,000	34,646	1.39
1972	127,873	37,365	1.35
1973	150,000	39,739	1.35
1974	105,000	42,259	1.25
1975	150,000	47,185	1.20
1976	150,000	50,005	1.03
1977	150,000	99,754	1.95
1978	100,000	151,265	2.49
1979	75,000	137,101	2.03
1980	75,000	181,738	2.15
1981	41,998#	211,575	2.29
1982	52,253#	283,588	2.98
1983	42,404#	255,981	2.58 est
total	3,273,140	2,361,041	

*Calendar year prior to 1942; fiscal year ending in year indicated thereafter.

**First six months.

#Plus approximately $30,000 interest on securities owned by the railroad.

Source: City of Prineville annual budgets.

but there was strong desire on the part of the city to obtain as much as possible.

While there was obvious merit in the sharing of the profits with the city, two difficulties ultimately became apparent. First, in retrospect, it is apparent that the railroad track maintenance was inadequate; certainly after 1973, and perhaps to some extent before that, the annual maintenance expenditures were not adequate to keep the track in good condition. Thus the railroad was showing a profit in excess of the actual earnings, taking track deterioration into consideration. The problem became very obvious in the late seventies, leading to the obtaining of a Federal grant for rehabilitation--a grant that should never have been necessary.

The second problem was that the city became so heavily dependent upon railway revenues that adjustment to a lower figure was very difficult.[1] The crisis arose in 1977, when the railroad indicated that it could not contribute more than $50,000. This greatly aggravated the city deficit; the city insisted on $25,000 additional but the following year the figure had to go down to $50,000. The problem is that the budget and property levy must be approved by the voters if the increase exceeds 6%--and, particularly with the coming of the recession in the lumber industry, voters have been reluctant to approve the increases--even though the rate is much lower than in neighboring cities. Oregon voters are more and more demonstrating the anti-tax sentiment that has swept the country. The 1977-78 budget discussion in the city council led to a clash over the operation of the railway, the high wages and salaries compared to those of the city, the extent to which funds were retained, and the like. Some members stressed the importance of not draining too much money from the railway, but the critics of the line felt that drastic steps should be taken--and some mentioned possible sale of the line.

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[1] This danger was pointed out to me by the city administrator in 1974.

As part of the terms of the Federal rehabilitation grant noted subsequently, the railway was prohibited from transferring funds to the city until the benefits from the rehabilitation exceeded the costs, except for payment for services. These were calculated to be about $42,000 in the 1982-83 fiscal year, primarily for police protection and general administration. But the city was very anxious to get the total contribution back to about $75,000 and so the earnings of a portion of the railway's securities was allocated to the city--totaling around $30,000 depending upon interest rates.

The total figures given above of course are not adjusted for inflation, nor do they take into consideration the timing of city expenditures and revenues. But if the original city contributions are included and adjustments are made for the timing of these at assumed interest rates, the city has gained, from the beginning of the railway, at least $1 million net.

Freight Cars

The railway has never owned its own freight cars for commercial use; various earlier suggestions to do so were rejected because of maintenance and repair questions. Nor did the railroad normally suffer from a car shortage, partly because it had two connecting roads providing boxcars. It also received some inbound cars with rough lumber, though most of these were Southern Pacific cars which it could not load for shipments east. In the early and mid seventies, there developed, nationwide, serious freight car shortages. These, in turn, led the Interstate Commerce Commission (ICC) to institute incentive per diem rates, which encouraged the development of car leasing firms. These firms had new cars built and developed arrangements with small railroads not normally owning cars to lease them, the per diem paid by the railroads actually using the cars being shared by the leasing firm and the railroad owner. With many small lines, there was no intention that the cars be used on the line at all--the aim was to keep them circulating and yielding rental.

The C of P was approached by representatives of SSI Rail Corporation, later part of ITEL, a San Francisco based conglomerate. After extended negotiations, an agreement was reached in 1977 whereby the railroad entered into a lease agreement for 200 boxcars, XM, 50'6" cars, 9'1" width, suitable for lumber loading. No payment was required of the railroad, but it would share in the revenues. The lease was for 15 years, with an option to extend for 5 more; at the end the cars would be returned to SSI and the City of Prineville markings removed. The first 15 cars arrived in July of 1977. There were several attractions to the city and the C of P:

1. Increased car availability. In 1977 and early in 1978 the road suffered from a serious shortage of cars to provide the shippers, as a nationwide shortage became acute, partly resulting from bad weather,

partly from a peaking of grain shipments, which pulled cars from lumber service. The C of P estimated that it was losing 35 to 50 percent of its revenue in that year (1977-78)--with serious inconvenience to the mills, which had to delay rail orders and also turned to trucks in substantial measure. With this shortage, the railways agreed to take 200 more cars in 1978; it actually ended up with 397 in total.

2. Lessened car hire costs. It was estimated that the city would save from $35,000 to $50,000 a year in reduced net per diem costs through the leasing of these cars.

3. Substantial net earnings. So long as the cars were fully utilized, the railway could net over $100,000 annually. This was the period in which railway earnings were commencing to fall, and the mayor was reported in the Central Oregonian, March 28, 1979, as saying: "If we don't get money somewhere, we aren't going to have a railroad."

Initially, the railroad did earn a profit from the arrangement. One estimate for 1978 was $95,000; my estimate for the year was $86,000. For the following year my estimate was $133,000. The cars also contributed a certain prestige value to the city and the railroad. The only initial unfavorable reaction was from the UP and the BN, which were hostile to the arrangement because it would lessen the earnings from their own freight cars and increase their payment to the C of P. Accordingly they cut off the free car hire time the C of P had always enjoyed. But this was only the beginning of the problems. The sharp increase in the number of box cars, the increased trend away from standard boxcars nationally, and the recession quickly converted the box car shortage into a great surplus. It is estimated that in mid

1982 there are 250,000 idle boxcars in the northwest alone. The rental earnings fell to $53,000 in 1980, and $28,000 in 1981. But more seriously, the cars came home to roost. There was no way the C of P could store all of the cars. About 200 went on to the McCloud River Railroad in Northern California, an ITEL subsidiary. ITEL, itself in bankruptcy, sued the C of P for costs of repainting, but ultimately dropped the suit, and took back about 250 of the cars, some of which went to the Seattle and North Coast, others to eastern roads. The C of P, as of May 18, 1982, had 147 of the cars--only about 50 of which are typically in use loaded with lumber and returning empty. The other 100 fill the sidings; they are a great nuisance, as they interfere with normal operations and increase switching costs. The BN and the UP did ultimately restore the free car hire period.

On the whole, while the railroad made some money on the deal, there is widespread feeling that the proposal was misrepresented--that something was put over on the city. The main problem was of course the end of the shortage--which in turn led the ICC to eliminate incentive per diem in 1981, making the leasing operations still less profitable.

Another problem is that the standard boxcar is becoming less and less suitable for use. In Prineville, American Forest Products, probably the largest shipper, has 51 special cars with moveable bulkheads owned by Evans and assigned to it; these are labelled Amador Central, a railroad subsidiary of AFP in California. They are much more satisfactory for millwork shipments than standard cars.

Some of the shippers prefer to use Thrall door cars; there are essentially three doors on each side rather than two, two of which can be open at once. This greatly facilitates unitized loading. The railroads generally are not happy with them, regarding them as somewhat dangerous. Some Minneapolis Northfield and Southern Thrall door cars are available to Prineville shippers on an assigned basis. Otherwise, the road provides C of P-leased cars as much as possible, and the two major roads tolerate this, though they are not happy with it.

For chip loading, the C of P has assigned to it a group of Ashley Drew and Northern cars, which are preferred by the shippers because of heavier loading--35 and sometimes 38 units--than most BN and UP cars. The only problem with the AD and N cars is that when fully loaded and wet, they have created some operational problems for the railroad. AD and N is owned by Georgia-Pacific Lumber Co.

Thus a decade ago, the freight cars on the line were primarily cars of the Union Pacific and the predecessors of the Burlington Northern; now few of these cars appear.

Piggy Back Operation

Until very recent years, the railroad management had not seriously considered piggyback traffic, feeling that the potential volume was too limited to warrant the expense. The impetus came from Schwab, much interested in the use of piggyback, partly because the plant is not located on a rail siding, partly because of the greater speed in delivery--from Memphis, a major source of supply, 7 to 10 days, vs. 20 to 21 by boxcar. The company tried for four years to get piggyback established, the railroad not initially being too enthusiastic, and then, apparently asking for an excessive share of the through rate.

Finally in 1981, an agreement was reached with the Burlington Northern for acceptable rates and rate division, and the railroad then built the ramp, which it was not willing to do until the rate was established. Already, a substantial portion of the tires is coming in by piggyback.

The possibility of shipping millwork and lumber by piggyback resulted in the establishment of outbound rates (in general piggyback rates are not related to the type of commodity handled). Some shipments are now going out in this fashion from American Forest Products. Other shippers, however, are not happy with the type of van available from the inbound tire traffic, because of loading, unloading, and cargo shifting problems. Some interest has been expressed in use of flatbed trucks in piggyback operation, as occurs in other parts of the country.

Under a recent agreement, Prineville has been established as the piggyback hub for central Oregon; piggyback loads to or from Bend, Redmond, and Madras will be unloaded or loaded in Prineville and delivered by C of P personnel. The other roads are apparently willing to do this to free themselves of the nuisance involved.

Management

In 64 years of operation, the road has had eight managers, but two of them served a total of 44 years. The first manager, E. J. Wilson, had railroad experience; the second had not, being resident engineer for the state highway department in Prineville. He kept the railroad together during the bad years, but was replaced by the City Council in 1945. For the first time an outsider, C. C. McGlenn, was brought in. He was a civil engineering graduate, with long experience with Great Northern branch lines. He was a highly successful manager, and built the railroad into an efficient and prosperous operation. After he retired in 1967, problems began. O. E. Wilson, the longtime auditor of the road, was made manager, but problems, apparently conflicts with the city council, arose and he left to become manager of the Klamath Northern, a position he still holds. Next, Merlin Nikolaus was brought from the Apache Railroad in Arizona, but the council became dissatisfied, and he was ousted in October, 1972, replaced in January, 1973 by Reed Johnson, who had been manager of the Mt. Hood Railroad, a Union Pacific subsidiary in Oregon. Johnson was faced with very serious and continuing family illness problems. He retired in 1979; the council asked for applications, received about 30 and selected Billy Wiggs, who had been an official of the Norfolk Southern (the original NS). The general feeling on the part of shippers and the city is that Wiggs has done a good job, in reducing costs as revenue declined, obtaining Federal grants for rehabilitation, getting piggyback rates, and cooperating with the shippers. Relations with employees are somewhat less good.

The management problems the road has faced, except under McGlenn, represent a basic difficulty for small railroads: where to find good managers, as there is no particular training source. Employees of major railroads typically have performed highly specialized work and may not be well suited for overall management. Persons brought in from the outside are not familiar with local conditions. The management of a municipal line has a particularly difficult problem of maintaining good relations with the city council. This may be much more trouble-some than relations with the board of directors of a private firm. The councils, over the years, have not hesitated to oust managers whom they felt were not doing an adequate job.

Employees

Currently there are 16 employees, as follows:

Track, including rehabilitation work	6
Shop	2
Train crew	3
Office	4
Manager	1

By contrast, there were 23, including the manager, in 1973, at the peak of operation. The number of track and shop employees was the same (there was a part-time helper in the shop in 1973, not included in the total); but the office staff, exclusive of the manager, had five. The large reduction was in train crew members; there were 9, as there were two crews, four men in one, five in the other. The line now operates with one three-man crew. Since the same crew does the switching and line haul, three persons are imperative even at present traffic levels.

Initially the employees were nonunion, and were paid on a monthly basis. In 1940 the crew members were organized by the Railroad Brotherhoods, and later the maintenance, shop, and office workers all joined unions in their fields. There was one strike by the shop employees in 1974. Standard wage scales are paid. The figures are shown in Table 6. The wages of hourly-basis employees are converted to an annual basis by multiplying the hourly rate by 40 x 52, and do not indicate the actual annual earnings, which are affected by hours actually worked, overtime, etc. The actual figures cannot be released.

TABLE 6

Relative Wages of City and Railway Employees

City Job	Annual Pay Range ($)	Railroad Job	Annual Pay Range ($)
		Monthly basis:	
City Administrator	25,992	Auditor	29,340
Senior accounting clerk	15,240	Agent	29,340
Chief of Police	23,724	Chief clerk	21,492
Patrol Officer	13,020-16,800	Roundhouse foreman	28,116
Corrections officer	13,020-16,800	Hourly basis[1]:	
Fire Chief	19,800	Conductor	26,645
Park Supervisor	15,600	Engineer	28,101
Street Superintendent	21,600	Brakeman	24,357
Mechanic	14,352	Section foreman	26,395
Sewer Superintendent	18,000	Laborer	20,155
Typist	8,400-10,500	Welder	23,421
		Machinist	24,502

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[1] Hourly wage rate converted to 40 hour week, 52 weeks. Actual pay may vary substantially because of overtime, and of inability to work full time.

Sources: *City of Prineville Budget*, 1982-83; railroad standard wage scale.

Table 6 also indicates the salaries of city employees, for purposes of comparison, as shown by the 1982-83 budget. The railway employees, in general are paid substantially better, for similar work, than those of the city. This is a long standing source of complaint in Prineville, particularly by the city council and shippers, and would make it very difficult to get the council and the voters to approve a subsidy for the railroad if it failed to cover expenses.

In addition to the relatively high (compared to city employees) wages, unionization by type of work significantly reduces the variety of tasks a particular employee can perform. Most small railroads are not unionized, and have maximum flexibility in the use of labor. The problem is aggravated in 1982 by the fact that the city employee unions have agreed to a wage freeze, whereas the railroad employees are scheduled for a 9% increase under national labor contracts. The manager is seeking to avoid this increase.

With a small line, particularly if traffic falls substantially below present levels, it is imperative that individual workers be free to perform a variety of tasks. On some small lines, train crew--often only two--will do track work or equipment repair in the hours they are not operating the train. This type of adjustment may become imperative for the C of P.

The Proposal to Buy the Railroad

Possible sale of the railroad has been mentioned at times over the years; the question came up when the city council was discussing the decline in railroad contributions to the city in 1977. In August, 1981, the railway manager proposed that the employees buy the railroad from the city for the price of $2 million. The proposal, specifically, was for a 5 year lease with option to buy. His argument was essentially that the employees could operate the line more efficiently if they owned it--an argument that did not find favor with many persons, as it suggested current inefficiency. The manager planned to put up some funds, but most were expected to come from the federal rail assistance and other federal programs. The employees on the whole were initially sympathetic, but not so when they learned that the manager would hold 51% of the stock, and some felt that primarily the objective of the manager was to eliminate the unions.

The city government was favorably inclined toward the proposal; the city would obtain $2 million--which, at 10%, would yield $200,000 a year, covering two-thirds or more of city expenditure now financed from property tax and three times as much as is now being derived from the railway. Several major shippers, however, were strongly opposed, fearing that private ownership might ultimately result in abandonment of the line.[1] There was also some skepticism about the $2 million becoming available. In any event, the manager dropped the plan when shippers objected. All in all, it was a little too good to be true. Transfer to private ownership would of course make the line subject to property and income tax.

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[1] The opposition was clearly expressed in a letter by Don Miller, President of Schwab, that appeared in the Central Oregonian, October 8, 1981.

The Federal Rehabilitation Grants

As late as 1968 the track was maintained in good condition. By the early seventies, however, track conditions began to slip; the relatively low figure of tie replacement of 100 a year in the period gave some indication. By the end of the seventies the track was typically in bad condition, the problem aggravated by the increase in the weight of the loaded chip cars. In the last five years, there were two serious derailments (December 1977, February 1982) in which cars were turned over, and 15 minor ones. Not only were about half the ties defective by the late seventies, but much of the rail was too light (some the original 75 pound rail) for modern heavy cars. The track problem was compounded by the use of lava cinder ballast, which is cheap in central Oregon but absorbs water and allows the rails to get out of alignment. The basic problem was that inadequate funds had been allocated for track improvement over a decade. The track met Federal Class I standards, allowing 10 mph operation, but nothing more.

One of the first actions Wiggs took was to seek Federal funds for rehabilitation, as provided under the 4R and the Rail Services Assistance Acts. The funds were available through the states; each state had a minimum sum, and since Oregon had very little mileage requiring rehabilitation (the Southern Pacific as a matter of policy generally avoided applying for funds), the C of P was able to obtain state approval for the assistance. Three grants have been obtained: $850,000 in 1980, now fully used; $509,000 in 1981, and $350,000 in 1982. Work was commenced at the juntion. Ties have been replaced (between 15,000 and 20,000), and old rails replaced by 100, 110, and 112 pound rails, most from the Milwaukee main line. The relay rail has cost $195 a ton, a relatively good figure. Rock ballast has replaced the lava cinder ballast. About half of the line will have rebuilt by October, 1982 and additional amounts from the third grant. Some additional funds are required, however, to complete the rehabilitation, and the manager is seeking these funds. When completed, the track will reach Class II (25 mph) standards, and the manager would like to get to the level of 35 mph. Additional speed, would, of course, have little effect upon cost.

Conclusions

The experience of the City of Prineville Railroad offers several conclusions, both for small-railroad operation and for municipal operation of railroad lines.

Small Railroad Operations. Detailed examination of the experience of the railway indicates the evolution, strengths and the problems of small railroads with relatively light traffic density. The C of P has in recent decades had far more traffic than many small railroads and branch lines but far less than the typical main line. The road provides a prototype of shifting traffic patterns over six decades.

1. A small local line could operate with marginal profit serving a small community dependent on the livestock industry before the coming of the motor vehicle.
2. Livestock traffic, plus inbound LCL merchandise traffic, was the type most vulnerable to truck competition. Most was lost by the 1930s and virtually all by the early fifties. A railroad serving a livestock producing area, without other sig-

nificant traffic, could not survive once trucking developed. There are many other examples throughout the country.

3. Other farm product traffic lasted a longer time, the potato traffic to the 1970s, but then has largely been taken over by trucks.
4. Lumber traffic remained almost completely with the railroad till the mid 1970s; in the last five years, truck competition has increased substantially, more so on lumber than on millwork. Wood chip traffic has remained on rail, but is threatened by a truck-barge combination.
5. Inbound carload manufactured goods traffic slowly eroded until very little was left, until the rapid growth of a tire wholesale firm in Prineville. Inbound traffic for this firm has become a major source of revenue. This development was fortuitous--the product of the initiative of a local resident.
6. With a traffic volume of 330 to 550 cars originated or terminated per mile, and ton miles per mile ranging from 280,000 to 380,000 per year, the road did well financially, earning an adequate return on investment, with the rate divisions the major roads were willing to provide. These rate divisions gave the railway a percentage disproportionate to the mileage, which was essential, given the performance of the switching and billing functions by the C of P. The cost per ton mile, in the peak traffic years, around 4 cents, was certainly a reasonable figure.

7. With a sharp drop in traffic in the last three years the road has been able to reduce costs but not proportionate to the traffic decline, and thus profits have vanished. This drop is largely a product of the depression in the lumber industry.
8. The Staggers Act, while giving the railroads as a whole much more rate freedom, is causing great concern for the C of P and its shippers, as with short lines elsewhere, because of a tendency of the major roads to eliminate some joint rates.
9. Despite the development of trucking, the shippers regard continuation of the railroad as of utmost importance to the economic health and development of the community.
10. There are special problems in the selection of a manager for a small railroad; there is essentially no "training school".
11. The fact that the railroad connects with both of the major rail systems serving the northwest is of great importance to it and its shippers.

Municipal Operations. There has been relatively little experience with municipal operation of railways in the U.S., and thus the experience of Prineville is particularly significant:

1. The building of the railway by the city, when private enterprise would not do it, was of tremendous importance to the economic development of the community; without it the lumber mills would have located on the main line and Prineville would never have developed. There is very substantial evidence of this effect.

2. The railway as a private firm probably could not have survived the losses of the 1930s.
3. Financially the city has done very well by its investment, the railroad having been a major source of city revenue over a long period.
4. On the whole the railway has operated with a high degree of efficiency; municipal operation does not involve inherent inefficiency.
5. The relationships between the city and the railroad have always been somewhat ambiguous. On the whole, however, the city has tried only to control general policy and leave day to day operating decisions to the manager.
6. Without question, the city, over the years, drained too much money from the railroad, resulting in inadequate track maintenance.
7. The experience shows the clear danger of a city relying on railroad profits for a large portion of the current operating budget; as the profits ended, the city has had a difficult time recouping the revenue from property taxes, especially in a period such as the present of severe depression (the unemployment rate in Crook County is 24% as of mid 1982) and general anti-tax sentiment.
8. The task of the manager of a city operated railroad is probably more difficult than that of one of a private firm, in view of the need to maintain good relations with the city council.

If traffic continues to fall, the railway and the city will be faced with a difficult task of reducing costs, made more difficult by the unionization of the employees and the payment of the national railroad wage scale. One consequence of the strong unionization has been to bring the earnings of railway employees well above those of city employees in jobs with similar skills. Narrowing of this gap and increased flexibility in the use of labor will be imperative, particularly if the point is reached at which city financial assistance would be required.

In the foreseeable future, given the ability to reduce costs, there is no danger of need to abandon the line; the traffic volume is still far above that of many small railroads and branch lines of major systems that are economically viable. But profitable operation will require substantial traffic increase.

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